## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rajesh Fotedar on 6/15/2010.

The application has been amended as follows:

21. (Currently Amended) A method of managing a virtual private network over an internet, the method comprising:

providing by a computer a graphical user interface configured to display a list of VPN switches, [[and]] for [[one]] each of the VPN switches, a menu of links, each link for accessing, via the internet, a web-page generated by a web-server associated with the VPN switch, wherein each of VPN switches offering virtual private network functions, [[each switch comprising a respective virtual private network element switch (VPN switch)]], wherein the list of VPN switches is displayed according to a hierarchical tree, each respective VPN switch comprising a node displayed on the hierarchical tree;

displaying by the computer a first selectable functionality in conjunction with the hierarchical tree, the first selectable functionality for instantiating a new physical VPN switch by adding a new node to the hierarchical tree;

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displaying by the computer a second selectable functionality in conjunction with the hierarchical tree, the second selectable functionality for defining a network tunnel within the virtual private network [[element]], wherein defining the network tunnel includes receiving a selection of a first [[extranet]] <u>VPN</u> switch as a tunnel start point and a second [[extranet]] <u>VPN</u> switch as a tunnel end point, the second selectable functionality allowing for at least one network subscriber access to the tunnel; and

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displaying a third selectable functionality in conjunction with the hierarchical tree, the third selectable functionality allowing for providing a view of at least one tunneling technology offered by [[a respective extranet]] the <u>VPN</u> switch;

transmitting an HTTP (Hyper Text Transfer Protocol) request when a link is selected by a user; and accessing a web-page associated with the selected link in response to the HTTP request, the web-page comprising configuration information related to the switch; modifying the configuration information of the switch via the accessed web-page.

26. (Cancelled)

27. (Cancelled)

28. (Currently Amended) The method of claim 21, wherein each of the links correspond to a uniform resource locator (URL), and the graphical user interface prepares each

URL by [[pretending]] <u>sending</u> an IP address of the switch to a predefined web-page location.

29. (Currently Amended) A method of managing a virtual private network, the method comprising:

providing <u>by a computer</u> a graphical user interface display that includes:

a list of extranet switches offering virtual private network functions (<u>VPN</u>

<u>switches</u>) and

a menu of HTTP links for [[an extranet]] each VPN switch selected from the list of VPN switches, each HTTP link, when selected, causing transmission of an HTTP request to access a web-page generated by a web-server associated with the [[extranet]] VPN switch, [[each switch comprising a respective virtual private network element switch (VPN switch)]], wherein the list of VPN switches is displayed according to a hierarchical tree, each respective VPN switch comprising a node displayed on the hierarchical tree;

displaying by the computer a first selectable functionality in conjunction with the hierarchical tree, the first selectable functionality for instantiating a new physical VPN switch by adding a new node to the hierarchical tree;

displaying by the computer a second selectable functionality in conjunction with the hierarchical tree, the second selectable functionality for defining a network tunnel within the virtual private network [[element]], wherein defining the network tunnel

includes receiving a selection of a first [[extranet]] <u>VPN</u> switch as a tunnel start point and a second [[extranet]] <u>VPN</u> switch as a tunnel end point, the second selectable functionality allowing for at least one network subscriber access to the tunnel; and

displaying a third selectable functionality in conjunction with the hierarchical tree, the third selectable functionality allowing for providing a view of at least one tunneling technology offered by [[a respective extranet]] the VPN switches;

transmitting an HTTP (Hyper Text Transfer Protocol) request when a link is selected by a user; and accessing a web-page associated with the selected link in response to the HTTP request, the web-page comprising configuration information related to the VPN switch;

modifying the configuration information of the VPN switch via the accessed webpage.

30. (Currently Amended) A system for managing a virtual private network, the system comprising:

a processor; and

a <u>non-transitory</u> computer readable medium electronically coupled to the processor; a plurality of instructions wherein [[at least a portion of]] said plurality of instructions are [[storable]] <u>stored</u> in the <u>non-transitory</u> computer readable medium, and f[[urther]] wherein the plurality of instructions are configured to cause the processor to perform the step of:

providing a graphical user interface configured to display a list of <u>VPN</u> switches, and for one of the <u>VPN</u> switches, a menu of links, each link for accessing, via the internet a web-page generated by a web-server associated with a the <u>VPN</u> switch, <u>wherein each of the VPN switches</u> offering virtual private network functions, [[each switch comprising a respective virtual private network [[element]] switch (VPN switch),]] wherein the list of VPN switches is displayed according to a hierarchical tree, each respective VPN switch comprising a node displayed on the hierarchical tree;

displaying a first selectable functionality in conjunction with the hierarchical tree, the first selectable functionality for instantiating a new physical VPN switch by adding a new node to the hierarchical tree;

displaying a second selectable functionality in conjunction with the hierarchical tree, the second selectable functionality for defining a network tunnel within the virtual private network [[element]], wherein defining the network tunnel includes receiving a selection of a first [[extranet]] <u>VPN</u> switch as a tunnel start point and a second [[extranet]] <u>VPN</u> switch as a tunnel end point, the second selectable functionality allowing for at least one network subscriber access to the tunnel; and

displaying a third selectable functionality in conjunction with the hierarchical tree, the third selectable functionality allowing for providing a view of at least one tunneling technology offered by [[a respective extranet]] the VPN switch;

transmitting an HTTP (Hyper Text Transfer Protocol) request when a link is selected by a user; and accessing a web-page associated with the selected link in response to the HTTP request, the web-page comprising configuration information

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related to the switch; modifying the configuration information of the switch via the accessed web-page.

35. (Cancelled)

36. (Cancelled)

37. (Currently Amended) The method of claim 30, wherein each of the links correspond to a uniform resource locator (URL), and the graphical user interface prepares each URL by [[pretending]] <u>sending</u> an IP address of the switch to a predefined web-page location.

38. (Currently Amended) A system for managing a virtual private network, the system comprising:

a processor; and

a <u>non-transitory</u> computer readable medium electronically coupled to the processor;

a plurality of instructions wherein [[at least a portion of]] said plurality of instructions are [[storable]] <u>stored</u> in the <u>non-transitory</u> computer readable medium, and wherein the plurality of instructions are configured to cause the processor to provide a graphical user interface display that includes:

a list of extranet switches offering virtual private network functions (VPN switches); and a menu of HTTP links for [[an extranet]] <a href="mailto:each of VPN switches">each of VPN switch selected</a> from the list <a href="mailto:of VPN switches">of VPN switches</a>[[.]] <a href="mailto:each HTTP link">each HTTP link</a>, when selected, causing transmission of an HTTP request to access a web-page generated by a web-server associated with the [[extranet]] <a href="mailto:VPN switch">VPN switch</a>, [[each switch comprising a respective virtual private network element switch (VPN switch),]] wherein the list of VPN switches is displayed according to a hierarchical tree, each respective VPN switch comprising a node displayed on the hierarchical tree;

displaying a first selectable functionality in conjunction with the hierarchical tree, the first selectable functionality for instantiating a new physical VPN switch by adding a new node to the hierarchical tree;

displaying a second selectable functionality in conjunction with the hierarchical tree, the second selectable functionality for defining a network tunnel within the virtual private network [[element]], wherein defining the network tunnel includes receiving a selection of a first [[extranet]] <u>VPN</u> switch as a tunnel start point and a second [[extranet]] <u>VPN</u> switch as a tunnel end point, the second selectable functionality allowing for at least one network subscriber access to the tunnel; and

displaying a third selectable functionality in conjunction with the hierarchical tree, the third selectable functionality allowing for providing a view of at least one tunneling technology offered by [[a respective extranet]] the VPN switches;

transmitting an HTTP (Hyper Text Transfer Protocol) request when a link is selected by a user; and accessing a web-page associated with the selected link in

response to the HTTP request, the web-page comprising configuration information related to the switch; modifying the configuration information of the switch via the accessed web-page.

39. (Cancelled)

## **Reasons for Allowance**

The following is an examiner's statement of reasons for allowance:

This communication warrants no examiner's reason for allowance, as applicant's reply makes evident the reason for allowance, satisfying the record as whole as required by rule 37 CFR 1.104 (e). In this case, the substance of applicant's remarks in the Amendment filed on 5/25/2010 with respect to the amended claim limitations point out the reason claims are patentable over the prior art of record. Thus, the reason for allowance is in all probability evident from the record and no statement for examiner's reason for allowance is necessary (see MPEP 13202.14).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUYEN M. DOAN whose telephone number is (571)272-4226. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu V. Nguyen can be reached on (571) 272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DUYEN M DOAN/ Primary Examiner, Art Unit 2452